EXHIBIT A

Custom Peptide Synthesis

Certificate of Analysis

Sequence Name: AA69.1 **Scale:** Research

Sequence:

'N' End:	Biotin
'N'--TGR / GMS / GGR / SSR / TRR / ETQ / L -- 'C'	
'C' End:	

Length: 19

~~2320~~ 2318.35

Molecular Weight: ~~2,094~~

Quantity: 20 mg 8.62x10 mmole

Form: Lyophilized powder.

Analysis:

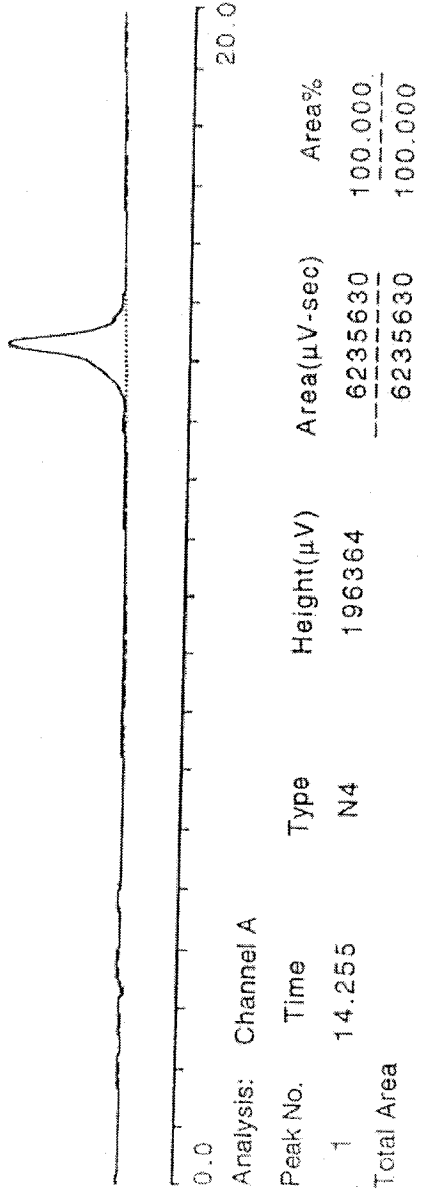
* HPLC
* Amino acid
* Mass spectroscopy

Storage and Stability: Stable for one year at -20 °C.

Lot No. 10017449

PLEASE SEE ATTACHED FOR QUALITY CONTROL DATA

Genemed Synthesis, Inc.
213 East Grand Avenue, South San Francisco, CA 94080 U.S.A.
Tel: 650-952-8193 Fax: 650-952-9540 www.genemedsyn.com

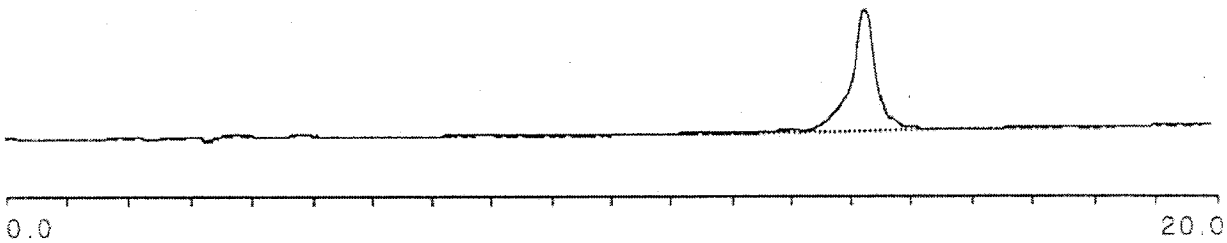


Data: 0-100 pepanal 006

Sample: 17449 25µl injected
Column: Vydac C18 1ml/min
Buffers: A=0.1%TFA; B=0.1%TFA in CH3CN
Gradient: 0-100%B, 20'
Monitor: 220nm, 1.0 AUFS

Processing File: profile#1
Method: 0-100 pepanal
Inject Vol:
Sampling Int: 0.1 Seconds

Data:



Analysis: Channel A

Peak No.	Time	Type	Height(µV)	Area(µV-sec)	Area%
1	14.255	N4	196364	6235630	100.000
Total Area				6235630	100.000

EXHIBIT A - CONTINUED

Custom Peptide Synthesis

Certificate of Analysis

Sequence Name: AA70.1 **Scale:** Research

Sequence:

'N' End:	Biotin
'N'--SGG / NRA / RQE / RLQ / RRR / ETQ / V -- 'C'	
'C' End:	

Length: 19

~~2,298~~ 2522.52 RK

Molecular Weight: ~~2,298~~ ,3

Quantity: 20 mg 7.924 mmole

Form: Lyophilized powder.

Analysis:

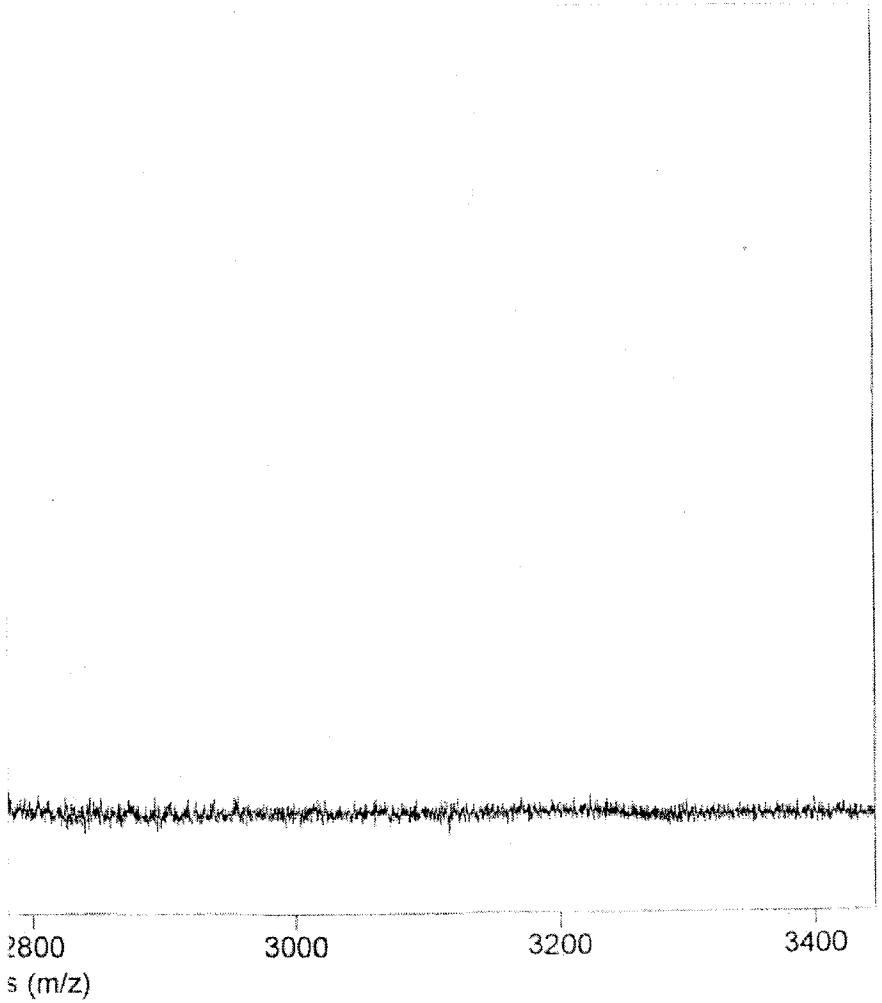
* HPLC _____
* Amino acid _____
* Mass spectroscopy _____

Storage and Stability: Stable for one year at -20 °C.

Lot No. 10017450

PLEASE SEE ATTACHED FOR QUALITY CONTROL DATA

Genemed Synthesis, Inc.
213 East Grand Avenue, South San Francisco, CA 94080 U.S.A.
Tel: 650-952-8193 Fax: 650-952-9540 www.genemedsyn.com



Laser : 2230
Scans Averaged: 61
Pressure: 6.61e-07
Low Mass Gate: OFF

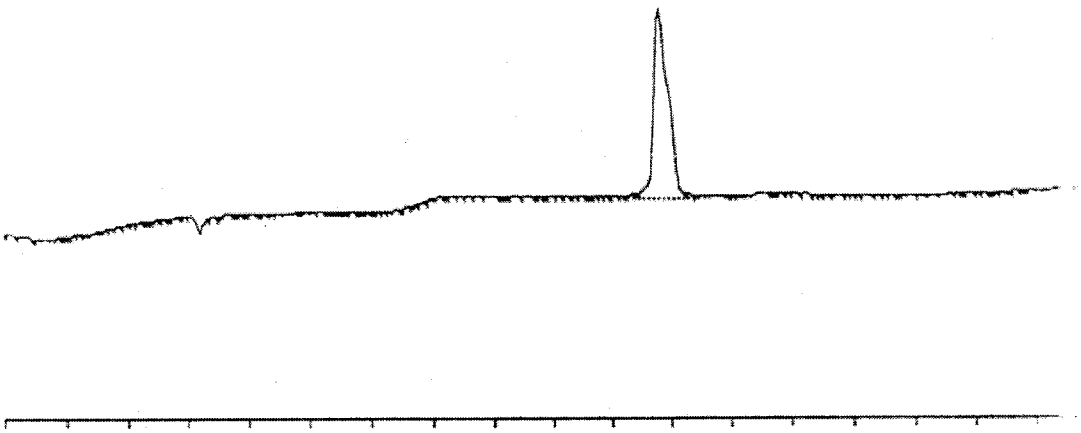
Mirror Ratio: 1.070
PSD Mirror Ratio:
Timed Ion Selector: 16.1 OFF
Negative

Date:
Data: 0-100 pepanal-. 016

Sample: 17450 25µl injected
Column: Vydac C18 1ml/min
Buffers: A=0.1%TFA; B=0.1%TFA in CH3CN
Gradient: 0-100%B, 20'
Monitor: 220nm, 1.0 AUFS

Processing File: profile#1
Method: 0-100 pepanal
Inject Vol:
Sampling Int: 0.1 Seconds

Data:



0.0

Analysis: Channel A

Peak No.	Time	Type	Height(µV)	Area(µV-sec)	A
1	10.780	N	96091	1355988	100
Total Area				1355988	100

EXHIBIT A – CONTINUED

Custom Peptide Synthesis

Certificate of Analysis

Sequence Name: AA72.1 **Scale:** Research

Sequence:

'N' End:	Biotin
'N'--AAG / GRS / ARG / GRL / QGR / RET / AL -- 'C'	
'C' End:	

Length: 20

~~2267~~ 2265.41 RK

Molecular Weight: ~~2,041~~ ,3

Quantity: 20 mg 8.8(x)0 mmole

Form: Lyophilized powder.

Analysis:

* HPLC
* Amino acid
* Mass spectroscopy

Storage and Stability: Stable for one year at -20 °C.

Lot No. 10017517

PLEASE SEE ATTACHED FOR QUALITY CONTROL DATA

Genemed Synthesis, Inc.
213 East Grand Avenue, South San Francisco, CA 94080 U.S.A.
Tel: 650-952-8193 Fax: 650-952-9540 www.genemedsyn.com

Data: 0-100 -014

Sample: 17517 25µl injected
Column: Vydac C18 1ml/min
Buffers: A=0.1%TFA; B=0.1%TFA in CH3CN
Gradient: 0-100%B, 20'
Monitor: 220nm, 1.0 AUFS 2

Processing File: profile#1
Method: 0-100 pepanal
Inject Vol:
Sampling Int: 0.1 Seconds
Data:

EXHIBIT A →
CONTINUED

ANASPEC
INCORPORATED

Certificate of Analysis

Peptide Name: AA80.1

Run Number: 17702

Sequence: Biotin-Gly-Arg-Trp-Thr-Gly-Arg-Ala-Met-Ser-Ala-Trp-Lys-Pro-Thr-Arg-Arg-Glu-Thr-Glu-Val-OH

Theoretical Mass(M+H⁺): ~~2603.0~~ 2600.51

Mass Found(M+H⁺): 2602.3

Solubility: Dissolve 1mg of peptide in 1ml Water

Appearance: White Powder

HPLC Purity: > *N/A %

Amount Delivered: 100 mg *Customer requested unpurified peptide

Storage : Keep Refrigerated

Remarks: Not for Human Use. Research Purposes Only.

Release By: Jaswinder Kaur **Date:** _____

Quality Control

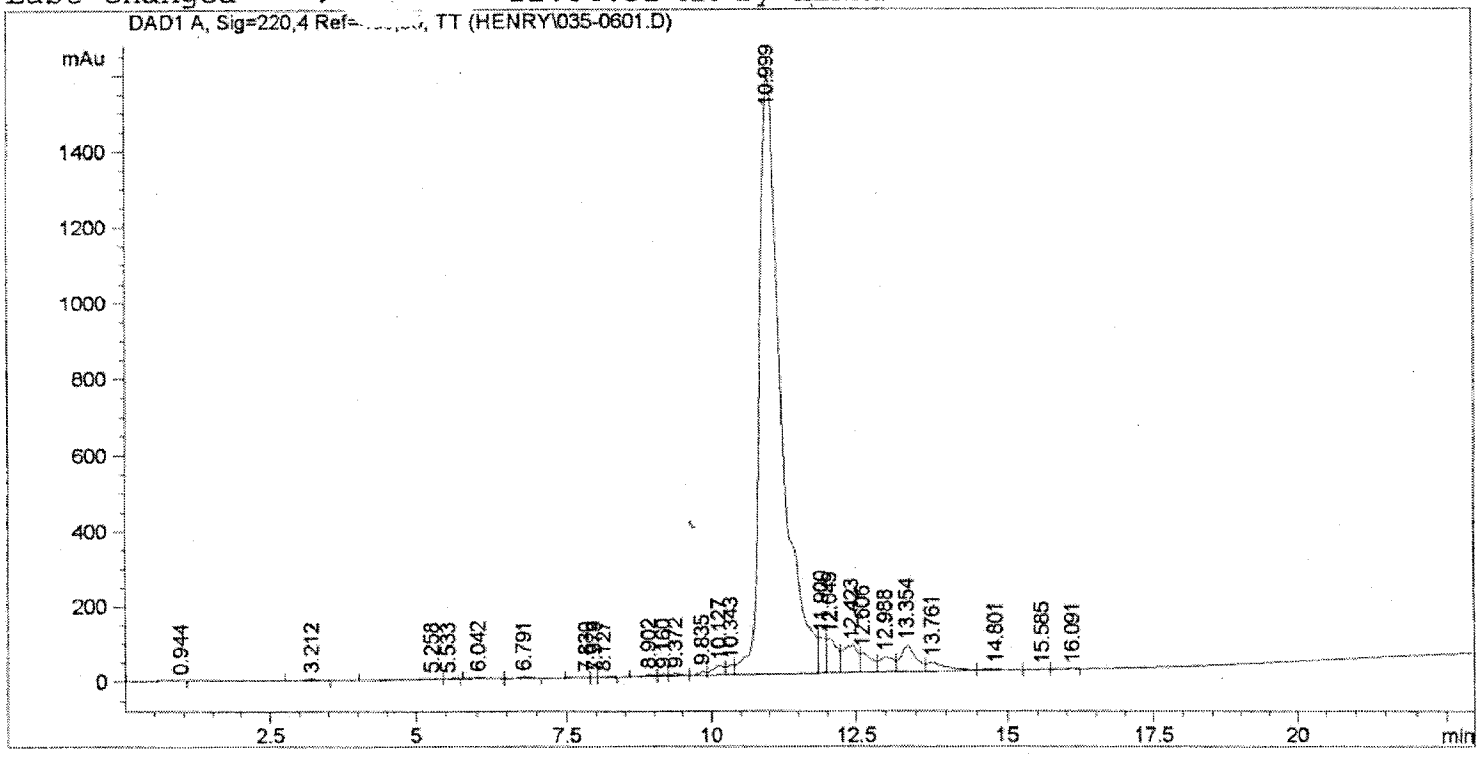
AnaSpec Inc. • 2149 O'Toole Avenue • Suite F • San Jose, CA 95131-1329
408/452-5055 • Fax 408/452-5059
www.anaspec.com • e-mail: service@anaspec.com

Data File C:\HPCHEM\1\DATA\HENRY\035-0601.D Sample Name: AA80.1

Injection Date :
Sample Name : AA80.1
Acq. Operator : HENRY

Seq. Line : 6
Vial : 35
Inj : 1
Inj Volume : 5 µl

Different Inj Volume from Sequence ! Actual Inj Volume : 2 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\DEF_LC.S
Method : C:\HPCHEM\1\METHODS\0-100-20.M
Last changed : 11:04:52 AM by HENRY



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 A, Sig=220,4 Ref=450,80, TT
Results obtained with standard integrator!

Peak #	RetTime [min]	Type	Width [min]	Area [mAu*s]	Height [mAu]	Area %
1	0.944	BV	1.0963	27.31302	2.94576e-1	0.0558
2	3.212	BV	0.2199	65.38581	4.18458	0.1336
3	5.258	PV	0.3324	38.73496	1.52027	0.0792
4	5.533	VB	0.1817	8.00819	7.34552e-1	0.0164
5	6.042	BV	0.1638	48.28724	4.21066	0.0987
6	6.791	PV	0.1581	51.54432	4.71076	0.1053
7	7.830	PV	0.2492	13.29615	6.67421e-1	0.0272
8	7.979	VV	0.0858	3.90877	6.33285e-1	7.988e-3
9	8.127	VB	0.1281	7.46610	7.92417e-1	0.0153
10	8.902	PV	0.1558	68.03886	5.92069	0.1390
11	9.160	VV	0.1115	43.50458	5.49541	0.0889

Custom Peptide Synthesis

Certificate of Analysis

Sequence Name: _____ **Scale:** Research

Sequence:

'N' End:	Biotin
'N'--AVG / GRP / ARG / GRL / QGR / RQT / QV -- 'C'	
'C' End:	

Length: 20

Molecular Weight: ~~2347~~ 2345.49 ~~2,121~~ .3

Quantity: 20 mg 8.541 o nmole

Form: Lyophilized powder.

Analysis:

* HPLC
* Amino acid
* Mass spectroscopy

Storage and Stability: Stable for one year at -20 °C.

Lot No. 10017523

PLEASE SEE ATTACHED FOR QUALITY CONTROL DATA

Genemed Synthesis, Inc.
213 East Grand Avenue, South San Francisco, CA 94080 U.S.A.
Tel: 650-952-8193 Fax: 650-952-9540 www.genemedsyn.com

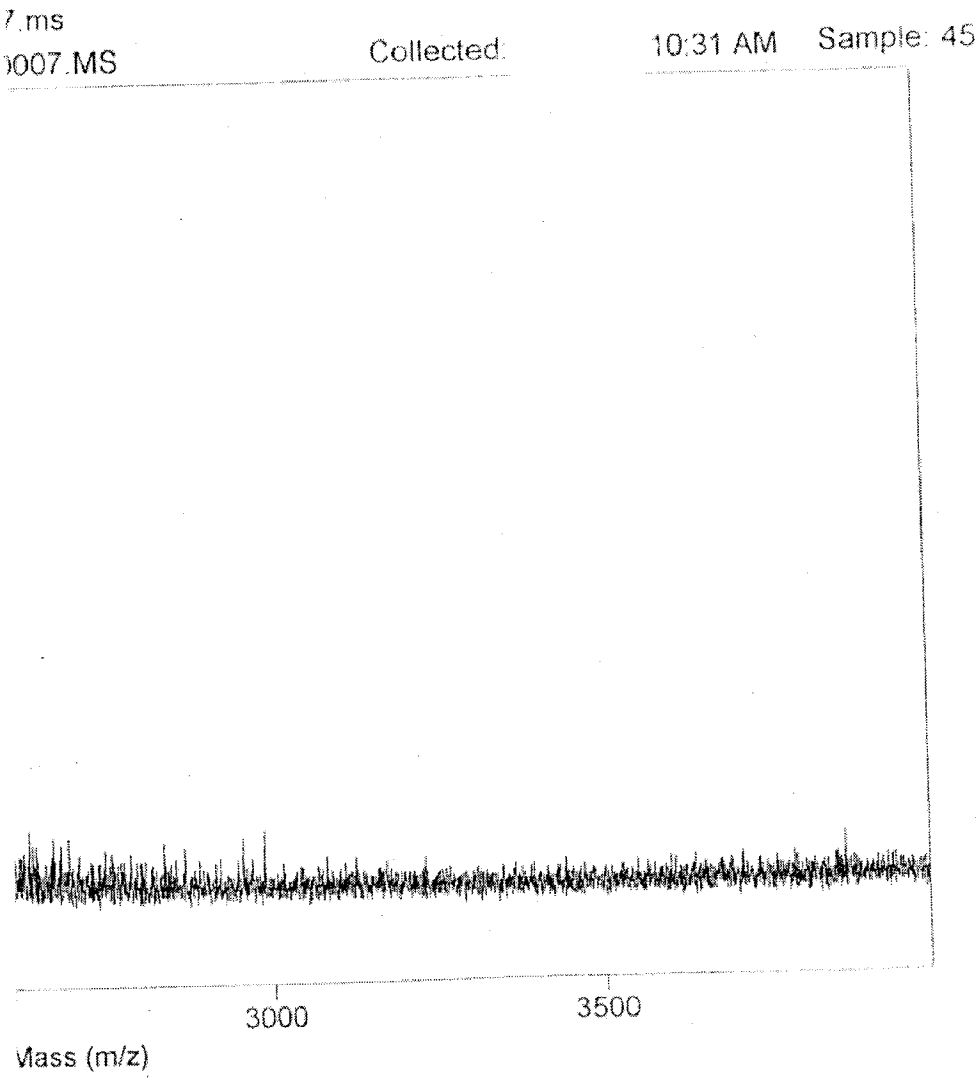


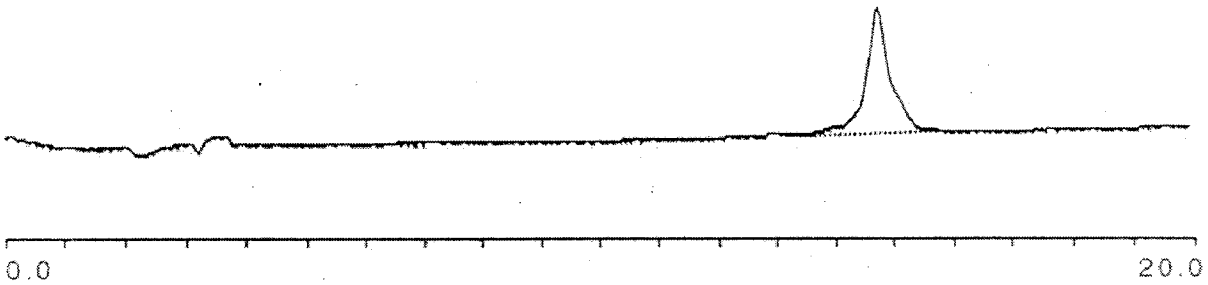
EXHIBIT A – CONTINUED

Date:
Data: c .00 pepanal- 007

Sample: 17523 25µl injected
Column: Vydac C18 1ml/min
Buffers: A=0.1%TFA; B=0.1%TFA in CH3CN
Gradient: 0-100%B, 20'
Monitor: 220nm, 1.0 AUFS

Processing File: profile#1
Method: 0-100 pepanal
Inject Vol:
Sampling Int: 0.1 Seconds

Data:



Analysis: Channel A

Peak No.	Time	Type	Height(µV)	Area(µV-sec)	Area%
1	14.721	N11	112398	3014595	100.000
Total Area				3014595	100.000

ANASPEC
INCORPORATED

Certificate of Analysis

Peptide Name:	**AA66.1**
Run Number:	**17700**
Sequence:	**BIOTIN-Thr-Gly-Ser-Ala-Leu-Gln-Ala-Trp-Arg-His-Thr-Ser-Arg-Gln-Ala-Thr-Glu-Ser-Thr-Val-OH**
Theoretical Mass($M+H^+$):	**2414.7**
Mass Found($M+H^+$):	**2414.3**
Solubility:	**Dissolve 1mg of peptide in 1ml Water**
Appearance:	**White Powder**
HPLC Purity:	**> *N/A %**
Amount Delivered:	**100 mg *Customer requested unpurified peptide**
Storage :	**Keep Refrigerated**

Remarks: Not for Human Use. Research Purposes Only.

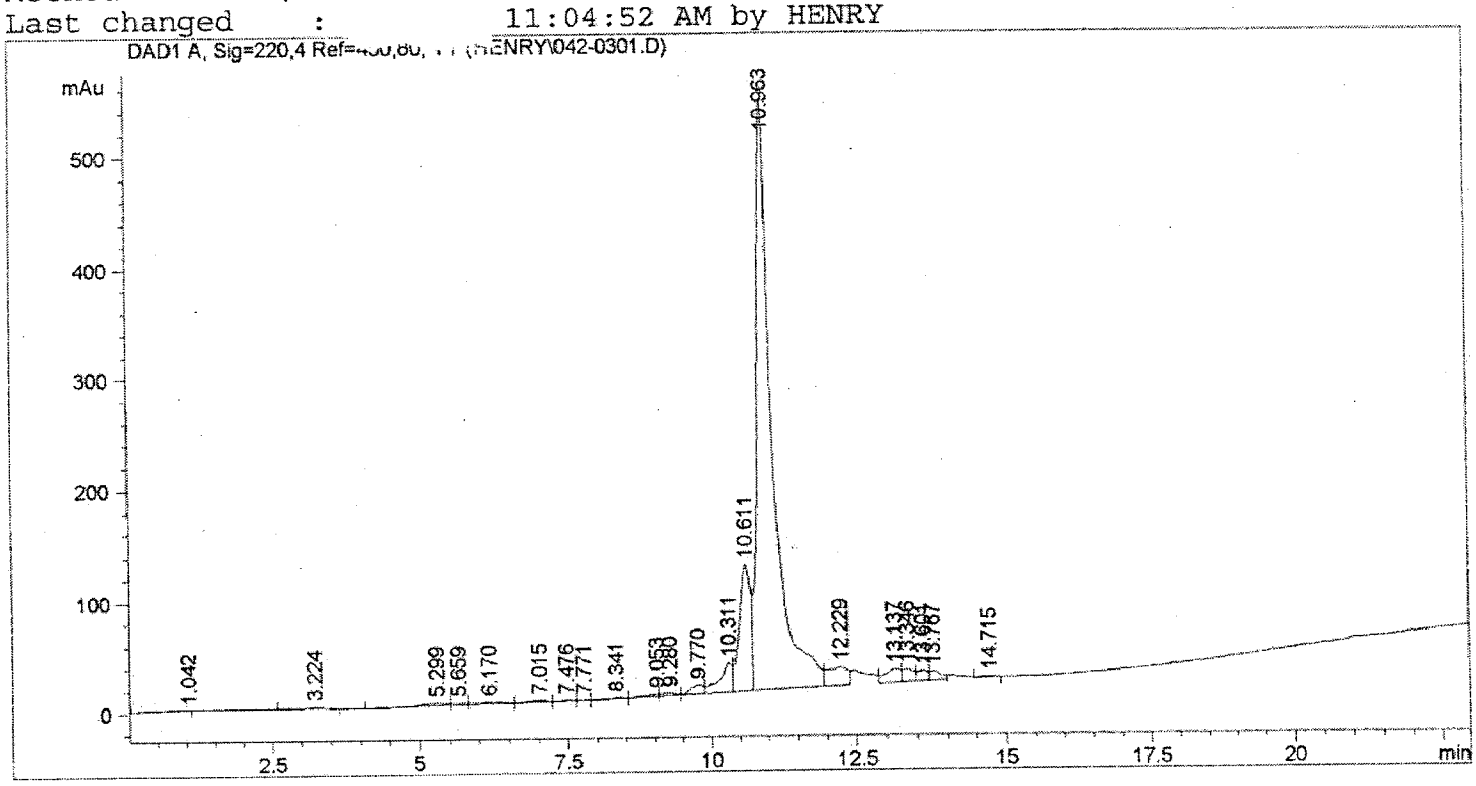
Release By: Jasvinder Kaur **Date:** _____

Quality Control

AnaSpec Inc. • 2149 O'Toole Avenue • Suite F • San Jose, CA 95131-1329
408/452-5055 • Fax 408/452-5059
www.anaspec.com • e-mail: service@anaspec.com

Data File C:\HPCHEM\1\DATA\HENRY\042-0301.D Sample Name: AA66.1

Injection Date : 7:47:03 PM Seq. Line : 3
Sample Name : AA66.1 Vial : 42
Acq. Operator : HENRY Inj : 1
Inj Volume : 5 µl
Different Inj Volume from Sequence ! Actual Inj Volume : 2 µl
Sequence File : C:\HPCHEM\1\SEQUENCE\DEF_LC.S
Method : C:\HPCHEM\1\METHODS\0-100-20.M
Last changed : 11:04:52 AM by HENRY



Area Percent Report

Sorted By : Signal
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: DAD1 A, Sig=220,4 Ref=450,80, TT
Results obtained with standard integrator!

Peak #	RetTime [min]	Type	Width [min]	Area [mAu*s]	Height [mAu]	Area %
1	1.042	BV	3.5187	29.64368	1.00569e-1	0.2185
2	3.224	BV	0.2008	29.17170	1.88686	0.2151
3	5.299	BV	0.3742	87.51175	2.88747	0.6452
4	5.659	VV	0.2618	37.78679	2.13710	0.2786
5	6.170	VV	0.4283	68.21159	1.91198	0.5029
6	7.015	VV	0.2753	40.34123	1.83774	0.2974
7	7.476	VV	0.1824	12.75530	9.23668e-1	0.0940
8	7.771	VV	0.1100	3.22723	3.85199e-1	0.0238
9	8.341	PV	0.1796	12.61311	1.15197	0.0930
10	9.053	PV	0.2286	44.93953	2.49896	0.3313
11	9.280	VV	0.2323	45.01051	2.51241	0.3318

From Page No. Start

PRISM Matrix ELISA G Assay

Date/Initials _____ Scottony

Reagents and Supplies

- Nunc Polysorp 96 well immuno-plate, Nunc cat#62409-005 batch#, 038642
- PBS pH 7.4 (phosphate buffered saline, 8g NaCl, 0.29g KCl, 1.44g Na_2HPO_4, 0.24g KH_2PO_4, add H_2O to 1L and pH 7.4; 0.2 µ filter) AVC lot# 97-88-2.
- Assay Buffer: 2% BSA in PBS (20g of bovine serum albumin per liter PBS, fraction V, ICN Biomedicals, cat#IC15142983 AVC lot# 97-111-3
- Goat anti-GST polyclonal Ab, stock 5 mg/ml, stored at 4°C, Amersham Pharmacia cat#27-4577-01, lot# 191545.
  - Dilute 1:1000 in PBS, final concentration 5 µg/ml. Date prepared _____
- HRP-Streptavidin, 2.5mg/2ml stock stored @ 4°C, Zymed cat#43-4323, lot#[illegible]
  dilute 1:2000 into Assay buffer, final [0.5 µg/ml]
- Wash Buffer, 0.2% Tween 20 in 50mM Tris pH 8.0, AVC lot# 97-107-02.
- Biotinylated peptides (HPLC purified, stock solution store in -20°C freezer #7)
- GST-PRISM proteins (stock stored @ -80°C, after 1st thaw store in -10°C freezer #7)
- TMB (3,3',5,5', teramethylbensidine), ready to use, Dako cat#S1600, lot# 07160.
- 0.18M H_2SO_4, Sigma cat.#S1526, AVC lot# 97-85-01
- 12-w multichannel pipettor & tips
- 50 ml reagent reservoirs, Costar#4870
- 50, 15 ml polypropylene conical tubes
- Costar Transtar 96 Costar#7605
- Transtar 96 Cartridge Costar#7610
- Transtar Costar#
- Cluster tubes
- Molecular Devices microplate reader (450 & 650 nm filters)
- SoftMax Pro software

*When using reagents stored at or 4°C or -20°C, remove & keep on ice

Protocol

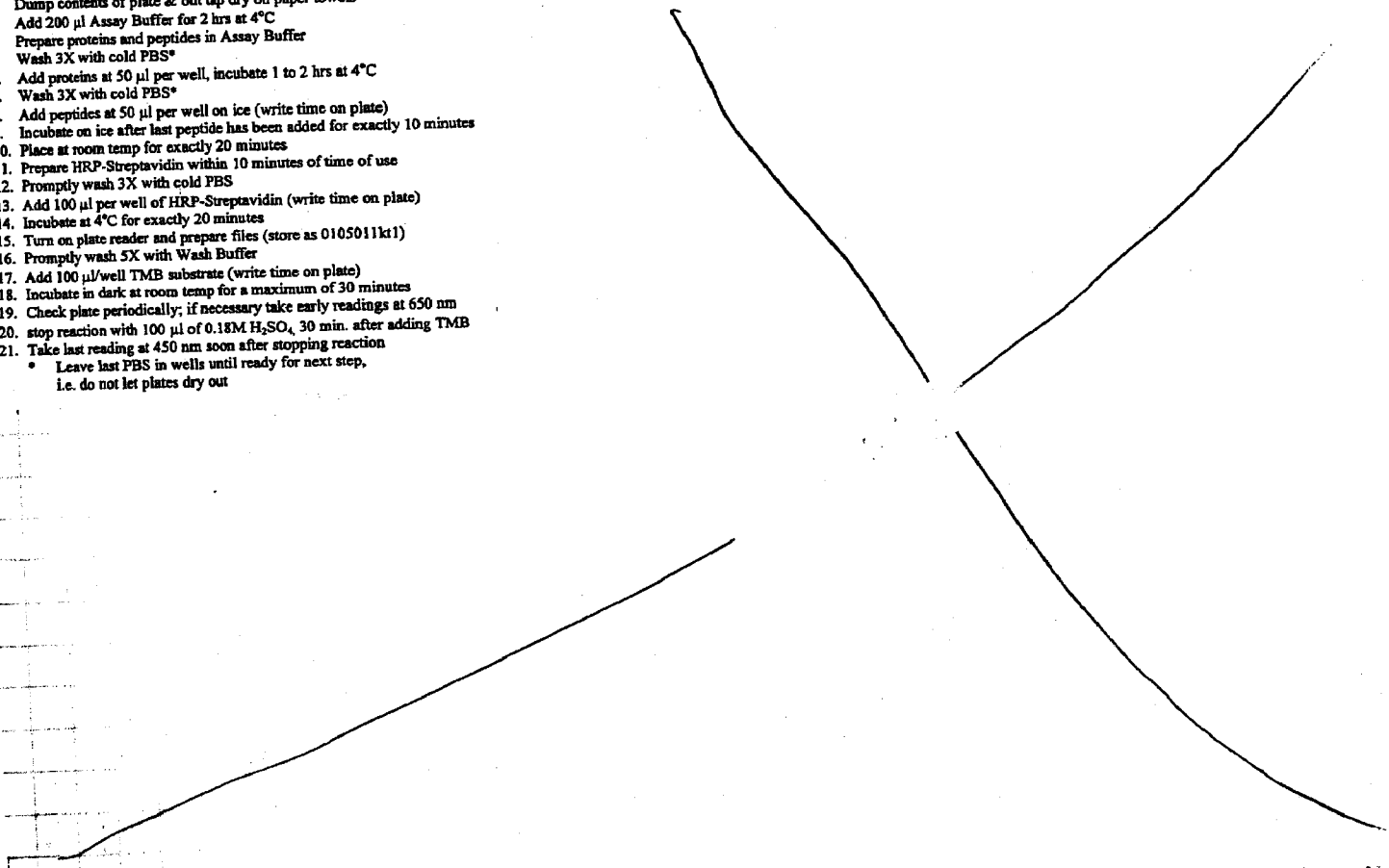
1. Coat plate with 100 µl of 5 µg/ml anti-GST, O/N @ 4°C
2. Dump contents of plate & out tap dry on paper towels
3. Add 200 µl Assay Buffer for 2 hrs at 4°C
4. Prepare proteins and peptides in Assay Buffer
5. Wash 3X with cold PBS*
6. Add proteins at 50 µl per well, incubate 1 to 2 hrs at 4°C
7. Wash 3X with cold PBS*
8. Add peptides at 50 µl per well on ice (write time on plate)
9. Incubate on ice after last peptide has been added for exactly 10 minutes
10. Place at room temp for exactly 20 minutes
11. Prepare HRP-Streptavidin within 10 minutes of time of use
12. Promptly wash 3X with cold PBS
13. Add 100 µl per well of HRP-Streptavidin (write time on plate)
14. Incubate at 4°C for exactly 20 minutes
15. Turn on plate reader and prepare files (store as 0105011kt1)
16. Promptly wash 5X with Wash Buffer
17. Add 100 µl/well TMB substrate (write time on plate)
18. Incubate in dark at room temp for a maximum of 30 minutes
19. Check plate periodically; if necessary take early readings at 650 nm
20. stop reaction with 100 µl of 0.18M H_2SO_4, 30 min. after adding TMB
21. Take last reading at 450 nm soon after stopping reaction
    - Leave last PBS in wells until ready for next step, i.e. do not let plates dry out

PEPTIDE

	1	2	3	4	5	6	1	2	3	4	5	6
	1	2	3	4	5	6	7	8	9	10	11	12
A	PROTEIN 1 →											
B	PROTEIN 2 →											
C	PROTEIN 3 →											
D	PROTEIN 4 →											
E	PROTEIN 5 →											
F	PROTEIN 6 →											
G	GST + LINKER CONTROL →											
H	STANDARD CURVE						STANDARD CURVE					

Standard Curve

Column	1, 7	2, 8	3, 9	4, 10	5, 11	6, 12
KIAA1634(1)(75-2)	←		0.1 µg/ml			→
DNAM-1 (AA22L)	100 µM	10 µM	1 µM	0.1 µM	0.01 µM	0.001 µM



To Page No 25

Witnessed & Understood by me,	Date	Invented by	Date
Jon Sc		Recorded by Amber Mortensen	

ELISA Plate
Arbor Vita Corp. CONFIDENTIAL

Plate # 1721

Creation Date	Creation Time	Notebook	Page Number	Template	Wavelength
	17:33:11	164	24	07	450

#	Col.	Row	Protein	Domain(s)	Prep #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
1	1	A	78/GAA1654	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.177
2	2	A	78/GAA1654	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.216
3	3	A	78/GAA1654	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	1.051
4	4	A	78/GAA1654	2	1	5	AA088/mpporin (mouse)	760	10		0	0.099
5	5	A	78/GAA1654	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.189
6	6	A	78/GAA1654	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	3.297
7	7	A	78/GAA1654	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.172
8	8	A	78/GAA1654	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.232
9	9	A	78/GAA1654	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	1.02
10	10	A	78/GAA1654	2	1	5	AA088/mpporin (mouse)	760	10		0	0.152
11	11	A	78/GAA1654	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.211
12	12	A	78/GAA1654	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	2.463
13	1	B	77/GAA1654	3	2	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.112
14	2	B	77/GAA1654	3	2	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.144
15	3	B	77/GAA1654	3	2	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.358
16	4	B	77/GAA1654	3	2	5	AA088/mpporin (mouse)	760	10		0	0.103
17	5	B	77/GAA1654	3	2	5	AA108.1/GLUR2 (glutamat	982	10		0	0.07
18	6	B	77/GAA1654	3	2	5	AA172/RA-GEF (rasirap1A	888	10		0	0.101
19	7	B	77/GAA1654	3	2	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.135
20	8	B	77/GAA1654	3	2	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.348
21	9	B	77/GAA1654	3	2	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.088
22	10	B	77/GAA1654	3	2	5	AA088/mpporin (mouse)	760	10		0	0.223
23	11	B	77/GAA1654	3	2	5	AA108.1/GLUR2 (glutamat	982	10		0	0.086
24	12	B	77/GAA1654	3	2	5	AA172/RA-GEF (rasirap1A	888	10		0	0.138
25	1	C	76/GAA1654	4	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.279
26	2	C	76/GAA1654	4	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.541
27	3	C	76/GAA1654	4	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.093
28	4	C	76/GAA1654	4	1	5	AA088/mpporin (mouse)	760	10		0	0.18
29	5	C	76/GAA1654	4	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.106
30	6	C	76/GAA1654	4	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.155
31	7	C	76/GAA1654	4	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.288
32	8	C	76/GAA1654	4	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.522
33	9	C	76/GAA1654	4	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.121
34	10	C	76/GAA1654	4	1	5	AA088/mpporin (mouse)	760	10		0	0.236
35	11	C	76/GAA1654	4	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.117
36	12	C	76/GAA1654	4	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.189
37	1	D	75/GAA1654	5	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.597
38	2	D	75/GAA1654	5	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.495
39	3	D	75/GAA1654	5	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.101
40	4	D	75/GAA1654	5	1	5	AA088/mpporin (mouse)	760	10		0	0.203
41	5	D	75/GAA1654	5	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.102
42	6	D	75/GAA1654	5	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.167
43	7	D	75/GAA1654	5	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.548
44	8	D	75/GAA1654	5	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.484
45	9	D	75/GAA1654	5	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.139
46	10	D	75/GAA1654	5	1	5	AA088/mpporin (mouse)	760	10		0	0.232
47	11	D	75/GAA1654	5	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.098
48	12	D	75/GAA1654	5	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.149
49	1	E	82/Mond PDZ	1	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.22
50	2	E	82/Mond PDZ	1	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.357
51	3	E	82/Mond PDZ	1	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.087
52	4	E	82/Mond PDZ	1	1	5	AA088/mpporin (mouse)	760	10		0	0.169
53	5	E	82/Mond PDZ	1	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.089
54	6	E	82/Mond PDZ	1	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.139
55	7	E	82/Mond PDZ	1	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.239
56	8	E	82/Mond PDZ	1	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.381
57	9	E	82/Mond PDZ	1	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.095
58	10	E	82/Mond PDZ	1	1	5	AA088/mpporin (mouse)	760	10		0	0.194
59	11	E	82/Mond PDZ	1	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.095
60	12	E	82/Mond PDZ	1	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.174
61	1	F	81/Mond PDZ	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.414
62	2	F	81/Mond PDZ	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.472
63	3	F	81/Mond PDZ	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.116
64	4	F	81/Mond PDZ	2	1	5	AA088/mpporin (mouse)	760	10		0	0.291
65	5	F	81/Mond PDZ	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.099
66	6	F	81/Mond PDZ	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.181
67	7	F	81/Mond PDZ	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.445
68	8	F	81/Mond PDZ	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.467
69	9	F	81/Mond PDZ	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.132
70	10	F	81/Mond PDZ	2	1	5	AA088/mpporin (mouse)	760	10		0	0.24
71	11	F	81/Mond PDZ	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.088
72	12	F	81/Mond PDZ	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.153
73	1	G	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.214
74	2	G	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.898
75	3	G	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.101
76	4	G	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.189
77	5	G	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	0.097
78	6	G	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.166
79	7	G	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.212
80	8	G	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.425
81	9	G	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.092
82	10	G	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.167
83	11	G	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	0.091
84	12	G	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.222
85	1	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	100		0	1.502
86	2	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	10		0	0.271
87	3	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	1		0	0.091
88	4	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.1		0	0.084
89	5	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.01		0	0.088
90	6	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.001		0	0.088
91	7	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	100		0	1.717
92	8	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	10		0	1.575
93	9	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	1		0	0.297
94	10	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.1		0	0.092
95	11	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.01		0	0.088
96	12	H	79/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.001		0	0.093

ELISA Plate
Arbor Vita Corp. CONFIDENTIAL

Plate # 1722

Creation Date	Creation Time	Notebook	Page Number	Template	Wavelength
	17:33:11	164	24	08	450

Cell	Col.	Row	Protein	Domain(s)	Prep #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
1	1	A	83/PDZ-79	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.114
2	2	A	83/PDZ-79	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.183
3	3	A	83/PDZ-79	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.398
4	4	A	83/PDZ-79	2	1	5	AA088/mpporin (mouse)	760	10		0	0.071
5	5	A	83/PDZ-79	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.097
6	6	A	83/PDZ-79	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.073
7	7	A	83/PDZ-79	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.101
8	8	A	83/PDZ-79	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.181
9	9	A	83/PDZ-79	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.376
10	10	A	83/PDZ-79	2	1	5	AA088/mpporin (mouse)	760	10		0	0.071
11	11	A	83/PDZ-79	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.69
12	12	A	83/PDZ-79	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.058
13	1	B	84/PDZ-79	3	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.171
14	2	B	84/PDZ-79	3	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.229
15	3	B	84/PDZ-79	3	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.425
16	4	B	84/PDZ-79	3	1	5	AA088/mpporin (mouse)	760	10		0	0.097
17	5	B	84/PDZ-79	3	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.169
18	6	B	84/PDZ-79	3	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.105
19	7	B	84/PDZ-79	3	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.162
20	8	B	84/PDZ-79	3	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.244
21	9	B	84/PDZ-79	3	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.457
22	10	B	84/PDZ-79	3	1	5	AA088/mpporin (mouse)	760	10		0	0.09
23	11	B	84/PDZ-79	3	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.156
24	12	B	84/PDZ-79	3	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.086
25	1	C	85/KIAA1095	1	2	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.109
26	2	C	85/KIAA1095	1	2	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.146
27	3	C	85/KIAA1095	1	2	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.518
28	4	C	85/KIAA1095	1	2	5	AA088/mpporin (mouse)	760	10		0	0.077
29	5	C	85/KIAA1095	1	2	5	AA108.1/GLUR2 (glutamat	982	10		0	0.191
30	6	C	85/KIAA1095	1	2	5	AA172/RA-GEF (rasirap1A	888	10		0	0.088
31	7	C	85/KIAA1095	1	2	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.102
32	8	C	85/KIAA1095	1	2	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.679
33	9	C	85/KIAA1095	1	2	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.674
34	10	C	85/KIAA1095	1	2	5	AA088/mpporin (mouse)	760	10		0	0.088
35	11	C	85/KIAA1095	1	2	5	AA108.1/GLUR2 (glutamat	982	10		0	0.089
36	12	C	85/KIAA1095	1	2	5	AA172/RA-GEF (rasirap1A	888	10		0	0.081
37	1	D	86/KIAA1095	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.207
38	2	D	86/KIAA1095	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.353
39	3	D	86/KIAA1095	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.489
40	4	D	86/KIAA1095	2	1	5	AA088/mpporin (mouse)	760	10		0	0.112
41	5	D	86/KIAA1095	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.234
42	6	D	86/KIAA1095	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.148
43	7	D	86/KIAA1095	2	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.207
44	8	D	86/KIAA1095	2	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.359
45	9	D	86/KIAA1095	2	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.418
46	10	D	86/KIAA1095	2	1	5	AA088/mpporin (mouse)	760	10		0	0.101
47	11	D	86/KIAA1095	2	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.194
48	12	D	86/KIAA1095	2	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.176
49	1	E	87/BAI-1	1	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.902
50	2	E	87/BAI-1	1	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.133
51	3	E	87/BAI-1	1	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.34
52	4	E	87/BAI-1	1	1	5	AA088/mpporin (mouse)	760	10		0	0.089
53	5	E	87/BAI-1	1	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.087
54	6	E	87/BAI-1	1	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.089
55	7	E	87/BAI-1	1	1	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.092
56	8	E	87/BAI-1	1	1	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.158
57	9	E	87/BAI-1	1	1	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.376
58	10	E	87/BAI-1	1	1	5	AA088/mpporin (mouse)	760	10		0	0.073
59	11	E	87/BAI-1	1	1	5	AA108.1/GLUR2 (glutamat	982	10		0	0.084
60	12	E	87/BAI-1	1	1	5	AA172/RA-GEF (rasirap1A	888	10		0	0.081
61	1	F	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.207
62	2	F	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	4
63	3	F	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	4
64	4	F	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.264
65	5	F	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	1.629
66	6	F	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.133
67	7	F	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.269
68	8	F	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	4
69	9	F	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	4
70	10	F	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.928
71	11	F	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	1.898
72	12	F	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.12
73	1	G	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.151
74	2	G	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.219
75	3	G	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.423
76	4	G	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.113
77	5	G	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	0.171
78	6	G	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.107
79	7	G	84/GST		7	5	AA67.1/HPV E6 #57 (syste	897	10		0	0.183
80	8	G	84/GST		7	5	AA72.1/HPV E6 33 (modifie	975	10		0	0.106
81	9	G	84/GST		7	5	AA76.1/HPV E6 58 (modifie	977	10		0	0.457
82	10	G	84/GST		7	5	AA088/mpporin (mouse)	760	10		0	0.102
83	11	G	84/GST		7	5	AA108.1/GLUR2 (glutamat	982	10		0	0.301
84	12	G	84/GST		7	5	AA172/RA-GEF (rasirap1A	888	10		0	0.277
85	1	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	100		0	1.179
86	2	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	10		0	0.279
87	3	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	1		0	0.257
88	4	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.1		0	0.126
89	5	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.01		0	0.097
90	6	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.001		0	0.101
91	7	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	100		0	1.486
92	8	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	10		0	1.162
93	9	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	1		0	0.301
94	10	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.1		0	0.155
95	11	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.01		0	0.155
96	12	H	75/GAA1654	1	2	0.1	AA23/DNMA-1	624	0.001		0	0.88

To Page No. 29

Witnessed & Understood by me,

Date

Invented by

Date

Recorded by

PRISM Matrix ELISA G Assay

Date/Initials 8/7/01 KC, BK

Reagents and Supplies

- Nunc Polysorp 96 well Immuno-plate, Nunc cat#62409-005 batch# 045987
- PBS pH 7.4 (phosphate buffered saline, 8g NaCl, 0.29g KCl, 1.44g Na_2HPO_4, 0.24g KH_2PO_4, add H_2O to 1L and pH 7.4; 0.2 µ filter) AVC lot# 97-93-04
- Assay Buffer: 2% BSA in PBS (20g of bovine serum albumin per liter PBS, fraction V, ICN Biomedicals, cat#IC15142983 AVC lot# 97-100-02
- Goat anti-GST polyclonal Ab, stock 5 mg/ml, stored at 4°C, Amersham Pharmacia cat#27-4577-01, lot# 191545
  - Dilute 1:1000 in PBS, final concentration 5 µg/ml. Date prepared: 8/6/01
- HRP-Streptavidin, 2.5mg/2ml stock stored @ 4°C, Zymed cat#43-4323, lot# 10162409 dilute 1:2000 into Assay buffer, final [0.5 µg/ml]
- Wash Buffer, 0.2% Tween 20 in 50mM Tris pH 8.0, AVC lot# 97-96-02
- Biotinylated peptides (HPLC purified, stock solution store in -20°C freezer #7)
- GST-PRISM proteins (stock stored @ -80°C, after 1st thaw store in -10°C freezer #7)
- TMB (3,3',5,5", teramethylbensidine), ready to use, Dako cat#S1600, lot# 07160
- 0.18M H_2SO_4, Sigma cat.#S1526, AVC lot# 97-96-03
- 12-w multichannel pipettor & tips
- 50 ml reagent reservoirs, Costar#4870
- 50, 15 ml polypropylene conical tubes
- Costar Transtar 96 Costar#7605
- Transtar 96 Cartridge Costar#7610
- Transtar Costar#
- Cluster tubes
- Molecular Devices microplate reader (450 & 650 nm filters)
- SoftMax Pro software

*When using reagents stored at or 4°C or -20°C, remove & keep on ice

Protocol

1. Coat plate with 100 µl of 5 µg/ml anti-GST, O/N @ 4°C
2. Dump contents of plate & out tap dry on paper towels
3. Add 200 µl Assay Buffer for 2 hrs at 4°C
4. Prepare proteins and peptides in Assay Buffer
5. Wash 3X with cold PBS*
6. Add proteins at 50 µl per well, incubate 1 to 2 hrs at 4°C
7. Wash 3X with cold PBS*
8. Add peptides at 50 µl per well on ice (write time on plate)
9. Incubate on ice after last peptide has been added for exactly 10 minutes
10. Place at room temp for exactly 20 minutes
11. Prepare HRP-Streptavidin within 10 minutes of time of use
12. Promptly wash 3X with cold PBS
13. Add 100 µl per well of HRP-Streptavidin (write time on plate)
14. Incubate at 4°C for exactly 20 minutes
15. Turn on plate reader and prepare files (store as 0105011kt1)
16. Promptly wash 5X with Wash Buffer
17. Add 100 µl/well TMB substrate (write time on plate)
18. Incubate in dark at room temp for a maximum of 30 minutes
19. Check plate periodically; if necessary take early readings at 650 nm
20. stop reaction with 100 µl of 0.18M H_2SO_4, 30 min. after adding TMB
21. Take last reading at 450 nm soon after stopping reaction
    - Leave last PBS in wells until ready for next step, i.e. do not let plates dry out

PEPTIDE

	1	2	3	4	5	6	1	2	3	4	5	6
	1	2	3	4	5	6	7	8	9	10	11	12
A	PROTEIN 1 →											
B	PROTEIN 2 →											
C	PROTEIN 3 →											
D	PROTEIN 4 →											
E	PROTEIN 5 →											
F	PROTEIN 6 →											
G	GST + LINKER CONTROL →											
H	STANDARD CURVE						STANDARD CURVE					

Standard Curve						
Column	1, 7	2, 8	3, 9	4, 10	5, 11	6, 12
PSD95(1) #143.1	5µg/ml					
Tax AA56L	5µM	1.19µM	0.283µM	0.067µM	0.016µM	0.004µM

~~186~~ → 183x6

36.2 } → Neuroligin - differently made biotinylated peptides for comparison
36.3 }

80.1 HPV 26

215 HIV

250 Serotonin

258 Noradrenaline

To Page No. 8

Witnessed & Understood by me, Marjorie James

Date

Invented by

Date

Recorded by

TITLE 1860×611A

Project No.
Book No. 157

From Page No 86

ELISA Plate
Arbor Vita Corp. CONFIDENTIAL

Plate # 1362

Creation Date	Creation Time	Notebook	Page Number	Template	Wavelength
	00:00:00	157	89	07	450

Cell	Col.	Row	Protein	Domain(s)	Prop #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
1	1	A	77/KIAA1634	3	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.092
2	2	A	77/KIAA1634	3	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.1
3	3	A	77/KIAA1634	3	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.148
4	4	A	77/KIAA1634	3	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.099
5	5	A	77/KIAA1634	3	2	5	AA350/Serotonin receptor	890	9.1		0	0.849
6	6	A	77/KIAA1634	3	2	5	AA354/norepinephrine trans	909	10		0	0.908
7	7	A	77/KIAA1634	3	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.078
8	8	A	77/KIAA1634	3	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.073
9	9	A	77/KIAA1634	3	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.109
10	10	A	77/KIAA1634	3	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.075
11	11	A	77/KIAA1634	3	2	5	AA350/Serotonin receptor	890	9.1		0	0.808
12	12	A	77/KIAA1634	3	2	5	AA354/norepinephrine trans	909	10		0	0.808
13	1	B	78/KIAA1634	4	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.125
14	2	B	78/KIAA1634	4	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.081
15	3	B	78/KIAA1634	4	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.901
16	4	B	78/KIAA1634	4	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.097
17	5	B	78/KIAA1634	4	1	5	AA350/Serotonin receptor	890	9.1		0	0.808
18	6	B	78/KIAA1634	4	1	5	AA354/norepinephrine trans	909	10		0	0.895
19	7	B	78/KIAA1634	4	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.07
20	8	B	78/KIAA1634	4	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.07
21	9	B	78/KIAA1634	4	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.853
22	10	B	78/KIAA1634	4	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.084
23	11	B	78/KIAA1634	4	1	5	AA350/Serotonin receptor	890	9.1		0	0.746
24	12	B	78/KIAA1634	4	1	5	AA354/norepinephrine trans	909	10		0	0.751
25	1	C	79/KIAA1634	5	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.115
26	2	C	79/KIAA1634	5	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.104
27	3	C	79/KIAA1634	5	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.693
28	4	C	79/KIAA1634	5	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.209
29	5	C	79/KIAA1634	5	1	5	AA350/Serotonin receptor	890	9.1		0	1.129
30	6	C	79/KIAA1634	5	1	5	AA354/norepinephrine trans	909	10		0	1.34
31	7	C	79/KIAA1634	5	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.095
32	8	C	79/KIAA1634	5	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.089
33	9	C	79/KIAA1634	5	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.359
34	10	C	79/KIAA1634	5	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.177
35	11	C	79/KIAA1634	5	1	5	AA350/Serotonin receptor	890	9.1		0	1.007
36	12	C	79/KIAA1634	5	1	5	AA354/norepinephrine trans	909	10		0	1.147
37	1	D	80/Novel PDZ	1	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.107
38	2	D	80/Novel PDZ	1	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.085
39	3	D	80/Novel PDZ	1	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.088
40	4	D	80/Novel PDZ	1	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.168
41	5	D	80/Novel PDZ	1	1	5	AA350/Serotonin receptor	890	9.1		0	1.013
42	6	D	80/Novel PDZ	1	1	5	AA354/norepinephrine trans	909	10		0	1.351
43	7	D	80/Novel PDZ	1	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.084
44	8	D	80/Novel PDZ	1	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.075
45	9	D	80/Novel PDZ	1	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.093
46	10	D	80/Novel PDZ	1	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.184
47	11	D	80/Novel PDZ	1	1	5	AA350/Serotonin receptor	890	9.1		0	0.875
48	12	D	80/Novel PDZ	1	1	5	AA354/norepinephrine trans	909	10		0	1.186
49	1	E	81/Novel PDZ	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.124
50	2	E	81/Novel PDZ	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.111
51	3	E	81/Novel PDZ	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.105
52	4	E	81/Novel PDZ	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.18
53	5	E	81/Novel PDZ	2	1	5	AA350/Serotonin receptor	890	9.1		0	1.234
54	6	E	81/Novel PDZ	2	1	5	AA354/norepinephrine trans	909	10		0	1.249
55	7	E	81/Novel PDZ	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.089
56	8	E	81/Novel PDZ	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.084
57	9	E	81/Novel PDZ	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.109
58	10	E	81/Novel PDZ	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.803
59	11	E	81/Novel PDZ	2	1	5	AA350/Serotonin receptor	890	9.1		0	1.198
60	12	E	81/Novel PDZ	2	1	5	AA354/norepinephrine trans	909	10		0	1.088
61	1	F	82/PDZ-73	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.078
62	2	F	82/PDZ-73	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.09
63	3	F	82/PDZ-73	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	1.739
64	4	F	82/PDZ-73	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.127
65	5	F	82/PDZ-73	2	1	5	AA350/Serotonin receptor	890	9.1		0	0.874
66	6	F	82/PDZ-73	2	1	5	AA354/norepinephrine trans	909	10		0	1.02
67	7	F	82/PDZ-73	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.076
68	8	F	82/PDZ-73	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.074
69	9	F	82/PDZ-73	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	1.887
70	10	F	82/PDZ-73	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.129
71	11	F	82/PDZ-73	2	1	5	AA350/Serotonin receptor	890	9.1		0	0.908
72	12	F	82/PDZ-73	2	1	5	AA354/norepinephrine trans	909	10		0	0.88
73	1	G	84/GST			5	AA36.3/Neuroligin (Intron 1	934	10		0	0.086
74	2	G	84/GST			5	AA36.3/Neuroligin (Intron 1	935	10		0	0.084
75	3	G	84/GST			5	AA80.1/HPV E6 E7 (syste	886	10		0	0.097
76	4	G	84/GST			5	AA215/CKR5 (HIV Co-rece	883	10		0	0.157
77	5	G	84/GST			5	AA350/Serotonin receptor	890	9.1		0	1.208
78	6	G	84/GST			5	AA354/norepinephrine trans	909	10		0	0.886
79	7	G	84/GST			5	AA36.3/Neuroligin (Intron 1	934	10		0	0.084
80	8	G	84/GST			5	AA36.3/Neuroligin (Intron 1	935	10		0	0.099
81	9	G	84/GST			5	AA80.1/HPV E6 E7 (syste	886	10		0	0.097
82	10	G	84/GST			5	AA215/CKR5 (HIV Co-rece	883	10		0	0.179
83	11	G	84/GST			5	AA350/Serotonin receptor	890	9.1		0	0.914
84	12	G	84/GST			5	AA354/norepinephrine trans	909	10		0	0.883
85	1	H	143/PBD5	1	3	5	AA68/TAX	704	5		0	1.408
86	2	H	143/PBD5	1	3	5	AA68/TAX	704	1.25		0	4
87	3	H	143/PBD5	1	3	5	AA68/TAX	704	0.313		0	0.219
88	4	H	143/PBD5	1	3	5	AA68/TAX	704	0.078		0	0.109
89	5	H	143/PBD5	1	3	5	AA68/TAX	704	0.02		0	0.071
90	6	H	143/PBD5	1	3	5	AA68/TAX	704	0.005		0	0.074
91	7	H	143/PBD5	1	3	5	AA68/TAX	704	5		0	1.58
92	8	H	143/PBD5	1	3	5	AA68/TAX	704	1.25		0	0.878
93	9	H	143/PBD5	1	3	5	AA68/TAX	704	0.313		0	0.28
94	10	H	143/PBD5	1	3	5	AA68/TAX	704	0.078		0	0.109
95	11	H	143/PBD5	1	3	5	AA68/TAX	704	0.02		0	0.075
96	12	H	143/PBD5	1	3	5	AA68/TAX	704	0.005		0	0.068

ELISA Plate
Arbor Vita Corp. CONFIDENTIAL

Plate # 1363

Creation Date	Creation Time	Notebook	Page Number	Template	Wavelength
	00:00:00	157	89	08	450

Cell	Col.	Row	Protein	Domain(s)	Prop #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
1	1	A	85/KIAA1085	1	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.086
2	2	A	85/KIAA1085	1	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.079
3	3	A	85/KIAA1085	1	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.591
4	4	A	85/KIAA1085	1	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.089
5	5	A	85/KIAA1085	1	2	5	AA350/Serotonin receptor	890	9.1		0	0.545
6	6	A	85/KIAA1085	1	2	5	AA354/norepinephrine trans	909	10		0	0.561
7	7	A	85/KIAA1085	1	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.091
8	8	A	85/KIAA1085	1	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.094
9	9	A	85/KIAA1085	1	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.539
10	10	A	85/KIAA1085	1	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.087
11	11	A	85/KIAA1085	1	2	5	AA350/Serotonin receptor	890	9.1		0	0.549
12	12	A	85/KIAA1085	1	2	5	AA354/norepinephrine trans	909	10		0	0.47
13	1	B	87/BAI-1	1	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.086
14	2	B	87/BAI-1	1	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.057
15	3	B	87/BAI-1	1	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.058
16	4	B	87/BAI-1	1	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.084
17	5	B	87/BAI-1	1	1	5	AA350/Serotonin receptor	890	9.1		0	0.84
18	6	B	87/BAI-1	1	1	5	AA354/norepinephrine trans	909	10		0	0.82
19	7	B	87/BAI-1	1	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.084
20	8	B	87/BAI-1	1	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.084
21	9	B	87/BAI-1	1	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	0.084
22	10	B	87/BAI-1	1	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.071
23	11	B	87/BAI-1	1	1	5	AA350/Serotonin receptor	890	9.1		0	0.851
24	12	B	87/BAI-1	1	1	5	AA354/norepinephrine trans	909	10		0	0.549
25	1	C	88/BAI-1	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.423
26	2	C	88/BAI-1	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.085
27	3	C	88/BAI-1	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
28	4	C	88/BAI-1	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.252
29	5	C	88/BAI-1	2	1	5	AA350/Serotonin receptor	890	9.1		0	1.185
30	6	C	88/BAI-1	2	1	5	AA354/norepinephrine trans	909	10		0	1.26
31	7	C	88/BAI-1	2	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.088
32	8	C	88/BAI-1	2	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.084
33	9	C	88/BAI-1	2	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
34	10	C	88/BAI-1	2	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.181
35	11	C	88/BAI-1	2	1	5	AA350/Serotonin receptor	890	9.1		0	1.577
36	12	C	88/BAI-1	2	1	5	AA354/norepinephrine trans	909	10		0	1.648
37	1	D	89/BAI-1	3	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.088
38	2	D	89/BAI-1	3	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.084
39	3	D	89/BAI-1	3	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.417
40	4	D	89/BAI-1	3	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.137
41	5	D	89/BAI-1	3	1	5	AA350/Serotonin receptor	890	9.1		0	0.863
42	6	D	89/BAI-1	3	1	5	AA354/norepinephrine trans	909	10		0	0.811
43	7	D	89/BAI-1	3	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.148
44	8	D	89/BAI-1	3	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.16
45	9	D	89/BAI-1	3	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	2.565
46	10	D	89/BAI-1	3	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.166
47	11	D	89/BAI-1	3	1	5	AA350/Serotonin receptor	890	9.1		0	0.791
48	12	D	89/BAI-1	3	1	5	AA354/norepinephrine trans	909	10		0	0.804
49	1	E	90/BAI-1	4	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.086
50	2	E	90/BAI-1	4	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.081
51	3	E	90/BAI-1	4	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
52	4	E	90/BAI-1	4	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.151
53	5	E	90/BAI-1	4	1	5	AA350/Serotonin receptor	890	9.1		0	0.958
54	6	E	90/BAI-1	4	1	5	AA354/norepinephrine trans	909	10		0	1.05
55	7	E	90/BAI-1	4	1	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.086
56	8	E	90/BAI-1	4	1	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.081
57	9	E	90/BAI-1	4	1	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
58	10	E	90/BAI-1	4	1	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.157
59	11	E	90/BAI-1	4	1	5	AA350/Serotonin receptor	890	9.1		0	0.964
60	12	E	90/BAI-1	4	1	5	AA354/norepinephrine trans	909	10		0	1.055
61	1	F	91/BAI-1	5	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.167
62	2	F	91/BAI-1	5	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.151
63	3	F	91/BAI-1	5	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
64	4	F	91/BAI-1	5	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.165
65	5	F	91/BAI-1	5	2	5	AA350/Serotonin receptor	890	9.1		0	0.883
66	6	F	91/BAI-1	5	2	5	AA354/norepinephrine trans	909	10		0	1.158
67	7	F	91/BAI-1	5	2	5	AA36.3/Neuroligin (Intron 1	934	10		0	0.147
68	8	F	91/BAI-1	5	2	5	AA36.3/Neuroligin (Intron 1	935	10		0	0.154
69	9	F	91/BAI-1	5	2	5	AA80.1/HPV E6 E7 (syste	886	10		0	4
70	10	F	91/BAI-1	5	2	5	AA215/CKR5 (HIV Co-rece	883	10		0	0.18
71	11	F	91/BAI-1	5	2	5	AA350/Serotonin receptor	890	9.1		0	0.888
72	12	F	91/BAI-1	5	2	5	AA354/norepinephrine trans	909	10		0	1.113
73	1	G	94/GST			5	AA36.3/Neuroligin (Intron 1	934	10		0	0.073
74	2	G	94/GST			5	AA36.3/Neuroligin (Intron 1	935	10		0	0.076
75	3	G	94/GST			5	AA80.1/HPV E6 E7 (syste	886	10		0	0.079
76	4	G	94/GST			5	AA215/CKR5 (HIV Co-rece	883	10		0	0.13
77	5	G	94/GST			5	AA350/Serotonin receptor	890	9.1		0	0.798
78	6	G	94/GST			5	AA354/norepinephrine trans	909	10		0	0.771
79	7	G	94/GST			5	AA36.3/Neuroligin (Intron 1	934	10		0	0.088
80	8	G	94/GST			5	AA36.3/Neuroligin (Intron 1	935	10		0	0.075
81	9	G	94/GST			5	AA80.1/HPV E6 E7 (syste	886	10		0	0.084
82	10	G	94/GST			5	AA215/CKR5 (HIV Co-rece	883	10		0	0.146
83	11	G	94/GST			5	AA350/Serotonin receptor	890	9.1		0	0.725
84	12	G	94/GST			5	AA354/norepinephrine trans	909	10		0	0.739
85	1	H	143/PBD5	1	3	5	AA68/TAX	704	5		0	1.268
86	2	H	143/PBD5	1	3	5	AA68/TAX	704	1.25		0	3.987
87	3	H	143/PBD5	1	3	5	AA68/TAX	704	0.313		0	0.185
88	4	H	143/PBD5	1	3	5	AA68/TAX	704	0.078		0	0.105
89	5	H	143/PBD5	1	3	5	AA68/TAX	704	0.02		0	0.071
90	6	H	143/PBD5	1	3	5	AA68/TAX	704	0.005		0	0.082
91	7	H	143/PBD5	1	3	5	AA68/TAX	704	5		0	1.181
92	8	H	143/PBD5	1	3	5	AA68/TAX	704	1.25		0	0.568
93	9	H	143/PBD5	1	3	5	AA68/TAX	704	0.313		0	0.198
94	10	H	143/PBD5	1	3	5	AA68/TAX	704	0.078		0	0.1
95	11	H	143/PBD5	1	3	5	AA68/TAX	704	0.02		0	0.086
96	12	H	143/PBD5	1	3	5	AA68/TAX	704	0.005		0	0.086

To Page No 88

Witnessed & Understood by me,
Marjorie Jones

Date

Invented by

Date

Recorded by

PRISM Matrix ELISA G Assay

Initials KC, BK

Sets and Supplies

Nunc Polysorp 96 well Immuno-plate, Nunc cat#62409-005 batch# 045987
PBS pH 7.4 (phosphate buffered saline, 8g NaCl, 0.29g KCl, 1.44g Na_2HPO_4, 0.24g KH_2PO_4, add H_2O to 1L and pH 7.4; 0.2 µ filter) AVC lot# 97-93-04
Assay Buffer: 2% BSA in PBS (20g of bovine serum albumin per liter PBS, fraction V, ICN Biomedicals, cat#IC15142983 AVC lot# 97-94-01, -04
Goat anti-GST polyclonal Ab, stock 5 mg/ml, stored at 4°C, Amersham Pharmacia cat#27-4577-01, lot# 191546
- Dilute 1:1000 in PBS, final concentration 5 µg/ml. Date prepared ____

HRP-Streptavidin, 2.5mg/2ml stock stored @ 4°C, Zymed cat#43-4323, lot#1016240
Dilute 1:2000 into Assay buffer, final [0.5 µg/ml]
Wash Buffer, 0.2% Tween 20 in 50mM Tris pH 8.0, AVC lot# 97-87-3
Biotinylated peptides (HPLC purified, stock solution store in -20°C freezer #7)
GST-PRISM proteins (stock stored @ -80°C, after 1st thaw store in -10°C freezer #7)
TMB (3,3',5,5', teramethylbensidine), ready to use, Dako cat#S1600, lot# 07160
0.18M H_2SO_4, Sigma cat.#S1526, AVC lot# 97-85-01
12-w multichannel pipettor & tips
50 ml reagent reservoirs, Costar#4870
50, 15 ml polypropylene conical tubes
Costar Transtar 96 Costar#7605
Transtar 96 Cartridge Costar#7610
Transtar Costar#
Cluster tubes
Molecular Devices microplate reader (450 & 650 nm filters)
SoftMax Pro software
When using reagents stored at or 4°C or -20°C, remove & keep on ice

Protocol

Coat plate with 100 µl of 5 µg/ml anti-GST, O/N @ 4°C
Dump contents of plate & out tap dry on paper towels
Add 200 µl Assay Buffer for 2 hrs at 4°C
Prepare proteins and peptides in Assay Buffer
Wash 3X with cold PBS*
Add proteins at 50 µl per well, incubate 1 to 2 hrs at 4°C
Wash 3X with cold PBS*
Add peptides at 50 µl per well on ice (write time on plate)
Incubate on ice after last peptide has been added for exactly 10 minutes
Place at room temp for exactly 20 minutes
Prepare HRP-Streptavidin within 10 minutes of time of use
Promptly wash 3X with cold PBS
Add 100 µl per well of HRP-Streptavidin (write time on plate)
Incubate at 4°C for exactly 20 minutes
Turn on plate reader and prepare files (store as 0105011kt1)
Promptly wash 5X with Wash Buffer
Add 100 µl/well TMB substrate (write time on plate)
Incubate in dark at room temp for a maximum of 30 minutes
Check plate periodically; if necessary take early readings at 650 nm
stop reaction with 100 µl of 0.18M H_2SO_4, 30 min. after adding TMB
Take last reading at 450 nm soon after stopping reaction
- Leave last PBS in wells until ready for next step, i.e. do not let plates dry out

PEPTIDE

	1	2	3	4	5	6	7	8	9	10	11	12
	1	2	3	4	5	6						
A	PROTEIN 1 →											
B	PROTEIN 2 →											
C	PROTEIN 3 →											
D	PROTEIN 4 →											
E	PROTEIN 5 →											
F	PROTEIN 6 →											
G	GST + LINKER CONTROL →											
H	STANDARD CURVE						STANDARD CURVE					

Standard Curve						
Column	1, 7	2, 8	3, 9	4, 10	5, 11	6, 12
PSD95(1) #143.1	5µg/ml					
Tax AA56L	5µM	1.19µM	0.283µM	0.067µM	0.016µM	0.004µM

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Witnessed & Understood by me, Marjorie James — Date

Invented by — Date

Recorded by Lee Marie Carlson

LE 59×18 8.1A

Project No.

Book No. 157

m Page No. 20

Creation Date: 17:10:16 | Creation Time | Notebook: 157 | Page Number: 17 | Template: 07 | Wavelength: 450

Row	Protein	Domain(s)	Prop #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
A	79/TAX2 (Lbo Protein)	1	4	5	AA66.1/HPV E6 006 (synt	886	10		0	0.043
A	79/TAX2 (Lbo Protein)	1	4	5	AA082/alpha-1-synrophin	747	10		0	0.173
A	79/TAX2 (Lbo Protein)	1	4	5	AA123/a-actinin 2	857	10		0	0.56
A	79/TAX2 (Lbo Protein)	1	4	5	AA147/Na+/Pi cotransporte	799	10		0	0.066
A	79/TAX2 (Lbo Protein)	1	4	5	AA177/L-bl receptor	839	10		0	0.066
A	79/TAX2 (Lbo Protein)	1	4	5	AA180/NMDA Glutamate R	882	10		0	0.105
A	79/TAX2 (Lbo Protein)	1	4	5	AA66.1/HPV E6 006 (synte	886	10		0	0.095
A	79/TAX2 (Lbo Protein)	1	4	5	AA082/alpha-1-synrophin	747	10		0	0.230
A	79/TAX2 (Lbo Protein)	1	4	5	AA123/a-actinin 2	857	10		0	0.073
A	79/TAX2 (Lbo Protein)	1	4	5	AA147/Na+/Pi cotransporte	799	10		0	0.136
A	79/TAX2 (Lbo Protein)	1	4	5	AA177/L-bl receptor	839	10		0	0.572
A	79/TAX2 (Lbo Protein)	1	4	5	AA180/NMDA Glutamate R	882	10		0	0.082
A	79/GAA1694	1	1	5	AA66.1/HPV E6 006 (synte	886	10		0	4
A	79/GAA1694	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.27
A	79/GAA1694	1	1	5	AA123/a-actinin 2	857	10		0	0.399
A	79/GAA1694	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.248
A	79/GAA1694	1	1	5	AA177/L-bl receptor	839	10		0	0.123
A	79/GAA1694	1	1	5	AA180/NMDA Glutamate R	882	10		0	4
A	79/GAA1694	1	1	5	AA66.1/HPV E6 006 (synte	886	10		0	4
A	79/GAA1694	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.254
A	79/GAA1694	1	1	5	AA123/a-actinin 2	857	10		0	0.301
A	79/GAA1694	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.334
A	79/GAA1694	1	1	5	AA177/L-bl receptor	839	10		0	0.149
A	79/GAA1694	1	1	5	AA180/NMDA Glutamate R	882	10		0	4
A	79/GAA1694	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.448
A	79/GAA1694	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.184
A	79/GAA1694	2	1	5	AA123/a-actinin 2	857	10		0	0.209
A	79/GAA1694	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.161
A	79/GAA1694	2	1	5	AA177/L-bl receptor	839	10		0	0.199
A	79/GAA1694	2	1	5	AA180/NMDA Glutamate R	882	10		0	2.812
A	79/GAA1694	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.834
A	79/GAA1694	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.300
A	79/GAA1694	2	1	5	AA123/a-actinin 2	857	10		0	0.177
A	79/GAA1694	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.107
A	79/GAA1694	2	1	5	AA177/L-bl receptor	839	10		0	0.13
A	79/GAA1694	2	1	5	AA180/NMDA Glutamate R	882	10		0	2.722
A	77/GAA1694	2	2	5	AA66.1/HPV E6 006 (synte	886	10		0	0.067
A	77/GAA1694	2	2	5	AA082/alpha-1-synrophin	747	10		0	0.188
A	77/GAA1694	2	2	5	AA123/a-actinin 2	857	10		0	0.086
A	77/GAA1694	2	2	5	AA147/Na+/Pi cotransporte	799	10		0	0.067
A	77/GAA1694	2	2	5	AA177/L-bl receptor	839	10		0	0.1
A	77/GAA1694	2	2	5	AA180/NMDA Glutamate R	882	10		0	0.106
A	77/GAA1694	2	2	5	AA66.1/HPV E6 006 (synte	886	10		0	0.167
A	77/GAA1694	2	2	5	AA082/alpha-1-synrophin	747	10		0	0.062
A	77/GAA1694	2	2	5	AA123/a-actinin 2	857	10		0	0.167
A	77/GAA1694	2	2	5	AA147/Na+/Pi cotransporte	799	10		0	0.14
A	77/GAA1694	2	2	5	AA177/L-bl receptor	839	10		0	0.09
A	77/GAA1694	2	2	5	AA180/NMDA Glutamate R	882	10		0	0.139
A	79/GAA1694	4	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.16
A	79/GAA1694	4	1	5	AA082/alpha-1-synrophin	747	10		0	0.341
A	79/GAA1694	4	1	5	AA123/a-actinin 2	857	10		0	0.12
A	79/GAA1694	4	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.135
A	79/GAA1694	4	1	5	AA177/L-bl receptor	839	10		0	0.566
A	79/GAA1694	4	1	5	AA180/NMDA Glutamate R	882	10		0	0.148
A	79/GAA1694	4	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.146
A	79/GAA1694	4	1	5	AA082/alpha-1-synrophin	747	10		0	0.157
A	79/GAA1694	4	1	5	AA123/a-actinin 2	857	10		0	0.377
A	79/GAA1694	4	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.147
A	79/GAA1694	4	1	5	AA177/L-bl receptor	839	10		0	0.484
A	79/GAA1694	4	1	5	AA180/NMDA Glutamate R	882	10		0	0.208
A	79/GAA1694	5	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.197
A	79/GAA1694	5	1	5	AA082/alpha-1-synrophin	747	10		0	4
A	79/GAA1694	5	1	5	AA123/a-actinin 2	857	10		0	0.179
A	79/GAA1694	5	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.146
A	79/GAA1694	5	1	5	AA177/L-bl receptor	839	10		0	0.026
A	79/GAA1694	5	1	5	AA180/NMDA Glutamate R	882	10		0	0.263
A	79/GAA1694	5	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.197
A	79/GAA1694	5	1	5	AA082/alpha-1-synrophin	747	10		0	4
A	79/GAA1694	5	1	5	AA123/a-actinin 2	857	10		0	0.197
A	79/GAA1694	5	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.354
A	79/GAA1694	5	1	5	AA177/L-bl receptor	839	10		0	0.576
A	79/GAA1694	5	1	5	AA180/NMDA Glutamate R	882	10		0	0.132
A	84/GST		3	5	AA66.1/HPV E6 006 (synte	886	10		0	0.186
A	84/GST		3	5	AA082/alpha-1-synrophin	747	10		0	0.28
A	84/GST		3	5	AA123/a-actinin 2	857	10		0	0.337
A	84/GST		3	5	AA147/Na+/Pi cotransporte	799	10		0	0.144
A	84/GST		3	5	AA177/L-bl receptor	839	10		0	0.19
A	84/GST		3	5	AA180/NMDA Glutamate R	882	10		0	0.173
A	84/GST		3	5	AA66.1/HPV E6 006 (synte	886	10		0	0.394
A	84/GST		3	5	AA082/alpha-1-synrophin	747	10		0	0.297
A	84/GST		3	5	AA123/a-actinin 2	857	10		0	0.161
A	84/GST		3	5	AA147/Na+/Pi cotransporte	799	10		0	0.117
A	84/GST		3	5	AA177/L-bl receptor	839	10		0	0.118
A	84/GST		3	5	AA180/NMDA Glutamate R	882	10		0	1.988
B	149/PBD85	1	1	5	AA66/TAX	704	5		0	1.906
B	149/PBD85	1	1	5	AA66/TAX	704	1.25		0	0.39
B	149/PBD85	1	1	5	AA66/TAX	704	0.313		0	0.411
B	149/PBD85	1	1	5	AA66/TAX	704	0.078		0	0.273
B	149/PBD85	1	1	5	AA66/TAX	704	0.02		0	0.247
B	149/PBD85	1	1	5	AA66/TAX	704	0.005		0	2.184
B	149/PBD85	1	1	5	AA66/TAX	704	5		0	1.961
B	149/PBD85	1	1	5	AA66/TAX	704	1.25		0	0.439
B	149/PBD85	1	1	5	AA66/TAX	704	0.313		0	0.189
B	149/PBD85	1	1	5	AA66/TAX	704	0.078		0	0.101
B	149/PBD85	1	1	5	AA66/TAX	704	0.02		0	0.072

Plate # 1081

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Cell	Col.	Row	Protein	Domain(s)	Prop #	Prot. Conc.	Peptide	Lot #	Peptide Conc.	Active Substance	AS Conc.	OD
1	1	A	80/Novel PDZ	1	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.107
2	2	A	80/Novel PDZ	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.15
3	3	A	80/Novel PDZ	1	1	5	AA123/a-actinin 2	857	10		0	2.541
4	4	A	80/Novel PDZ	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.108
5	5	A	80/Novel PDZ	1	1	5	AA177/L-bl receptor	839	10		0	0.086
6	6	A	80/Novel PDZ	1	1	5	AA180/NMDA Glutamate R	882	10		0	0.164
7	7	A	80/Novel PDZ	1	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.103
8	8	A	80/Novel PDZ	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.186
9	9	A	80/Novel PDZ	1	1	5	AA123/a-actinin 2	857	10		0	2
10	10	A	80/Novel PDZ	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.1
11	11	A	80/Novel PDZ	1	1	5	AA177/L-bl receptor	839	10		0	0.08
12	12	A	80/Novel PDZ	1	1	5	AA180/NMDA Glutamate R	882	10		0	0.148
13	1	B	81/Novel PDZ	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.256
14	2	B	81/Novel PDZ	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.179
15	3	B	81/Novel PDZ	2	1	5	AA123/a-actinin 2	857	10		0	0.258
16	4	B	81/Novel PDZ	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.151
17	5	B	81/Novel PDZ	2	1	5	AA177/L-bl receptor	839	10		0	0.111
18	6	B	81/Novel PDZ	2	1	5	AA180/NMDA Glutamate R	882	10		0	0.101
19	7	B	81/Novel PDZ	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.15
20	8	B	81/Novel PDZ	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.186
21	9	B	81/Novel PDZ	2	1	5	AA123/a-actinin 2	857	10		0	0.126
22	10	B	81/Novel PDZ	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.066
23	11	B	81/Novel PDZ	2	1	5	AA177/L-bl receptor	839	10		0	0.084
24	12	B	81/Novel PDZ	2	1	5	AA180/NMDA Glutamate R	882	10		0	0.145
25	1	C	82/PDZ-73	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.196
26	2	C	82/PDZ-73	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.191
27	3	C	82/PDZ-73	2	1	5	AA123/a-actinin 2	857	10		0	0.219
28	4	C	82/PDZ-73	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.156
29	5	C	82/PDZ-73	2	1	5	AA177/L-bl receptor	839	10		0	0.06
30	6	C	82/PDZ-73	2	1	5	AA180/NMDA Glutamate R	882	10		0	0.195
31	7	C	82/PDZ-73	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.146
32	8	C	82/PDZ-73	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.156
33	9	C	82/PDZ-73	2	1	5	AA123/a-actinin 2	857	10		0	0.161
34	10	C	43/PDZ-73	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.066
35	11	C	43/PDZ-73	2	1	5	AA177/L-bl receptor	839	10		0	0.067
36	12	C	82/PDZ-73	2	1	5	AA180/NMDA Glutamate R	882	10		0	0.177
37	1	D	85/KIAA1085	1	2	5	AA66.1/HPV E6 006 (synte	886	10		0	0.186
38	2	D	85/KIAA1085	1	2	5	AA082/alpha-1-synrophin	747	10		0	0.13
39	3	D	85/KIAA1085	1	2	5	AA123/a-actinin 2	857	10		0	0.067
40	4	D	85/KIAA1085	1	2	5	AA147/Na+/Pi cotransporte	799	10		0	0.103
41	5	D	85/KIAA1085	1	2	5	AA177/L-bl receptor	839	10		0	0.576
42	6	D	85/KIAA1085	1	2	5	AA180/NMDA Glutamate R	882	10		0	0.341
43	7	D	85/KIAA1085	1	2	5	AA66.1/HPV E6 006 (synte	886	10		0	0.153
44	8	D	85/KIAA1085	1	2	5	AA082/alpha-1-synrophin	747	10		0	0.111
45	9	D	85/KIAA1085	1	2	5	AA123/a-actinin 2	857	10		0	0.066
46	10	D	85/KIAA1085	1	2	5	AA147/Na+/Pi cotransporte	799	10		0	0.08
47	11	D	85/KIAA1085	1	2	5	AA177/L-bl receptor	839	10		0	0.083
48	12	D	85/KIAA1085	1	2	5	AA180/NMDA Glutamate R	882	10		0	0.335
49	1	E	87/BAI-1	1	1	5	AA66.1/HPV E6 006 (synt	886	10		0	0.076
50	2	E	87/BAI-1	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.136
51	3	E	87/BAI-1	1	1	5	AA123/a-actinin 2	857	10		0	0.067
52	4	E	87/BAI-1	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.06
53	5	E	87/BAI-1	1	1	5	AA177/L-bl receptor	839	10		0	0.071
54	6	E	87/BAI-1	1	1	5	AA180/NMDA Glutamate R	882	10		0	0.074
55	7	E	87/BAI-1	1	1	5	AA66.1/HPV E6 006 (synte	886	10		0	0.079
56	8	E	87/BAI-1	1	1	5	AA082/alpha-1-synrophin	747	10		0	0.142
57	9	E	87/BAI-1	1	1	5	AA123/a-actinin 2	857	10		0	0.067
58	10	E	87/BAI-1	1	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.073
59	11	E	87/BAI-1	1	1	5	AA177/L-bl receptor	839	10		0	0.067
60	12	E	87/BAI-1	1	1	5	AA180/NMDA Glutamate R	882	10		0	0.063
61	1	F	88/BAI-1	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	4
62	2	F	88/BAI-1	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.226
63	3	F	88/BAI-1	2	1	5	AA123/a-actinin 2	857	10		0	0.412
64	4	F	88/BAI-1	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.269
65	5	F	88/BAI-1	2	1	5	AA177/L-bl receptor	839	10		0	0.121
66	6	F	88/BAI-1	2	1	5	AA180/NMDA Glutamate R	882	10		0	3.909
67	7	F	88/BAI-1	2	1	5	AA66.1/HPV E6 006 (synte	886	10		0	4
68	8	F	88/BAI-1	2	1	5	AA082/alpha-1-synrophin	747	10		0	0.223
69	9	F	88/BAI-1	2	1	5	AA123/a-actinin 2	857	10		0	0.363
70	10	F	88/BAI-1	2	1	5	AA147/Na+/Pi cotransporte	799	10		0	0.261
71	11	F	88/BAI-1	2	1	5	AA177/L-bl receptor	839	10		0	0.109
72	12	F	88/BAI-1	2	1	5	AA180/NMDA Glutamate R	882	10		0	3.901
73	1	G	84/GST		3	5	AA66.1/HPV E6 006 (synte	886	10		0	0.121
74	2	G	84/GST		3	5	AA082/alpha-1-synrophin	747	10		0	0.148
75	3	G	84/GST		3	5	AA123/a-actinin 2	857	10		0	0.126
76	4	G	84/GST		3	5	AA147/Na+/Pi cotransporte	799	10		0	0.079
77	5	G	84/GST		3	5	AA177/L-bl receptor	839	10		0	0.071
78	6	G	84/GST		3	5	AA180/NMDA Glutamate R	882	10		0	0.106
79	7	G	84/GST		3	5	AA66.1/HPV E6 006 (synte	886	10		0	0.117
80	8	G	84/GST		3	5	AA082/alpha-1-synrophin	747	10		0	0.136
81	9	G	84/GST		3	5	AA123/a-actinin 2	857	10		0	0.126
82	10	G	84/GST		3	5	AA147/Na+/Pi cotransporte	799	10		0	0.091
83	11	G	84/GST		3	5	AA177/L-bl receptor	839	10		0	0.075
84	12	G	84/GST		3	5	AA180/NMDA Glutamate R	882	10		0	0.069
85	1	H	143/PBD85	1	1	5	AA66/TAX	704	5		0	1.741
86	2	H	143/PBD85	1	1	5	AA66/TAX	704	1.25		0	0.779
87	3	H	143/PBD85	1	1	5	AA66/TAX	704	0.313		0	0.261
88	4	H	143/PBD85	1	1	5	AA66/TAX	704	0.078		0	0.122
89	5	H	143/PBD85	1	1	5	AA66/TAX	704	0.02		0	0.14
90	6	H	143/PBD85	1	1	5	AA66/TAX	704	0.005		0	0.072
91	7	H	143/PBD85	1	1	5	AA66/TAX	704	5		0	1.787
92	8	H	143/PBD85	1	1	5	AA66/TAX	704	1.25		0	0.745
93	9	H	143/PBD85	1	1	5	AA66/TAX	704	0.313		0	0.265
94	10	H	143/PBD85	1	1	5	AA66/TAX	704	0.078		0	0.115
95	11	H	143/PBD85	1	1	5	AA66/TAX	704	0.02		0	0.072
96	12	H	143/PBD85	1	1	5	AA66/TAX	704	0.005		0	0.069

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essed & Understood by me,

Marjorie Jones

Date

Invented by

Date

Recorded by

BIOGRAPHICAL SKETCH OF PETER S. LU, M.D.

NAME	POSITION TITLE
Lu, Peter Sin-yi	President/CEO
eRA COMMONS USER NAME	Arbor Vita Corporation

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
California Institute of Technology	B.S.	1977	Biology
University of Washington	M.S.	1980	Microbiology/Immunology
University of Washington Medical School	M.D.	1988	Medicine

A. Positions and honors.

Positions and Employment

1988-1989 Medical intern, Internal Medicine; University of Washington Medical School
1989-1994 Resident and research fellow, Department of Dermatology; Stanford University
1992-1998 Post-Doctoral fellow, Howard Hughes Medical Institute; Stanford University
1992-1998 Clinical Instructor, Attending, Psoriais Day Care Center, Department of Dermatology, Stanford Medical School
1995-present Director, Stanford Papua New Guinea Medical Project
1998-present Founder, President, CEO, Arbor Vita Corporation
2002-present Medical Director, Community Pregnancy Center, STD clinic

Research Experience and Appointments

1974-1976 Mechanism of antibody diversity; California Institute of Technology; advisor Leroy Hood, M.D./Ph.D.
1977-1978 Gene regulation in development; California Institute of Technology; advisor Eric Davidson, Ph.D.
1978-1981 Role if idiotypic network in tumor immunity; University of Washington; advisor Robert Nowinski, Ph.D.
1981-1984 Eukaryotic gene regulation; University of Washington; advisor Harold Weintraub, M.D./Ph.D.
1992-1998 Adhesion molecules in T cell activation; Howard Hughes Medical Institute, Stanford University; advisor Mark M. Davis, Ph.D.

Honors

1988 Alpha Omega Alpha, University of Washington
1991 Resident Teaching Award, Stanford Medical School
1991 Paul H. Jacobs Award, Stanford Medical School
2001-Present Principal Investigator of Numerous Grants from the National Institutes of Health

B. Peer-reviewed publications (in chronological order).

Murata, Y., Martin, C. B., Ikenoue, T., Lu, P. S. (1978). Antepartum evaluation of the pre-ejection period of the fetal cardiac cycle. Am. J. Ob/Gyn. *132*: 278-*284*.

Kindel, S., Lu, P. S., Smoller, B. (1994). Intravascular crystals provide a diagnostic clue in the diagnosis of monoclonal cryoglobulinemia. J. Eur. Acad. Dermatol. Venereol. *3*: 185-188.

Messika, E. J., Lu, P. S., Sung, Y. J., Yao., T., Chi, J. T., Chien, Y. H., Davis, M. M. (1998). Differential effect of B lymphocyte-induced maturation protein (Blimp-1) expression on cell fate during B cell development. J. Exp. Med. *188*: 135-146